



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,965	08/21/2003	Issaku Sato	1050/HIROSE	7583
27649	7590	05/31/2006	EXAMINER	
MICHAEL TOBIAS			SAVAGE, JASON L	
#40				
1717 K ST. NW, SUITE 613			ART UNIT	
WASHINGTON, DC 20036			PAPER NUMBER	
			1775	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,965

Applicant(s)

SATO ET AL.

Examiner

Jason L. Savage

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20051128</u> . | 6) <input type="checkbox"/> Other: _____ |

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 10/919,525. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in copending Application No. 10/919,525 fall within the scope of what is claimed in the present Application in claims 1-11. The only differences between the claims is that copending Application No. 10/919,525 requires that a resin layer is coated on the surface of the bearing metal layer whereas the present Application contains no such limitation. However, the claims of the instant Application uses comprising in the claims which allows for additional elements to be added to the sliding part.

Claims 7-13 of the instant Application also differ from claims 7-10 of copending Application No. 10/919,525 in that the present claims recite the backing is steel whereas the copending Application does not specify the metal type. However, the use of steel would have been an obvious selection for the backing metal recited in the copending Application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato'033 (US 6,492,033) in view of either Sato'728 (US 4,243,728) or JP'441 (JP 05-248441).

Sato'033 teaches a multi-layer copper based bearing metal layer which is bonded to a metal steel backing by sintering of the composite bearing material wherein the bearing metal layer comprises a mixture of copper alloy including 7-13 % Sn and further includes solid lubricant powders such as graphite and molybdenum disulfide in amounts up to 2% and 0.5% respectively (col. 3, ln. 36-60). Sato'033 further teaches

Art Unit: 1775

that the sintered bearing layer is subsequently densified by pressing as well as annealed (col. 4, ln. 42-54).

Sato'033 is silent to the solid lubricant's being plated with copper. Sato'728 teaches that sintered bearing materials formed by mixing powders of copper, tin or other metals with solid lubricant is known (col. 1, ln. 18-24). Sato'728 further teaches that it is known to coat the solid lubricants with a metal such as copper in order to insure there is uniform mixing of the lubricant in the bearing and to insure the bearing has sufficient strength (col. 1, ln. 24-33). JP'441 teaches bearing formed by sintering copper particles which are mixed with copper coated graphite particles which results in uniform dispersion of the graphite in the bearing and suitable bearing strength (abs).

It would have been obvious to one of ordinary skill in the art to have modified the sliding layer composite of Sato'033 by substituting coated solid lubricants such as copper coated graphite powder with a reasonable expectation of success of forming bearing having a uniform dispersion of the coated lubricant materials and having suitable strength.

Regarding claim 12 and the limitation that the sliding part consist of copper, tin and the copper coated graphite; although Sato'033 teaches that the copper alloy may contain at least 0.1 mass percent of silver, Specific claimed alloy, whose compositions are in such close proportions to those in the prior art that, prima facie one skilled in the art would have expected them to have the same properties, must be considered to have been obvious from known alloys, *Titanium Metals Corporation of America V. Banner*, 227 USPQ 773.

Allowable Subject Matter

Claims 4-11 and 13 contain allowable subject matter but are provisionally rejected on the grounds of nonstatutory obviousness-type double patenting above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Savage whose telephone number is 571-272-1542. The examiner can normally be reached on M-F 6:30-4:00.

Response to Arguments

Applicant's arguments with respect to claim 1-3 and 12 have been considered but are moot in view of the new ground(s) of rejection.

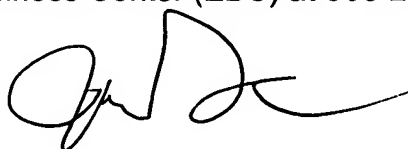
Applicant argued there was no motivation to combine the previously cited reference of JP'521 with that of Sato'033. In an attempt to clarify the rejection, new grounds of rejection have been set forth above based on Sato'033 in view of either Sato'728 or JP'441. Both Sato'728 and JP'441 teach that coating solid lubricants with a thin coating layer of metal such as copper is known to allow for these particles to be more uniformly dispersed in the bearing material. As such, it would have been obvious to have modified the invention of Sato'033 by using copper coated graphite particles.

Art Unit: 1775

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Savage whose telephone number is 571-272-1542. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jason Savage

5-22-06



JENNIFER C. MCNEIL
SUPERVISORY PATENT EXAMINER

5/23/06